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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,855	02/14/2002	John J. O'Mahony	3659-40	6324
23117	7590	02/11/2004	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			DEAK, LESLIE R	
			ART UNIT	PAPER NUMBER
			3762	
DATE MAILED: 02/11/2004				

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/073,855

Applicant(s)

O'MAHONY ET AL.

Examiner

Leslie R. Deak

Art Unit

3762

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address***Period for Reply****A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 20 November 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-38 is/are pending in the application.  
4a) Of the above claim(s) 1-25 and 31-38 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 26-30 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 14 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                    5) Notice of Informal Patent Application (PTO-152)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7,12.                    6) Other:

## DETAILED ACTION

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 16-30 in Paper No. 10 is acknowledged. However, examiner indicated that claims 1-21, 22-25, 26-30, and 31-38 were grouped together. Accordingly, examiner has examined claims 26-30 in the present action.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 26, 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,178,603 to Prince in view of US 5,211,849 to Kitaevich et al. Prince discloses a system and method for monitoring an extracorporeal blood loop, including flowing blood from a patient, through the loop, and back to the patient. A controller monitors the pressure in the extracorporeal loop, detects occlusions, and adjusts the pumping speed until the occlusion condition has been rectified, then bringing the pumping speed back up to normal (see columns 3-4). Prince fails to disclose a filtration apparatus, but does disclose that his system and method may be used for various extracorporeal circulation setups. Kitaevich discloses a hemofiltration system and method that remove blood from a patient filter it, and return it to the patient. Kitaevich discloses that various pressure

transducers in the system, including one between the filtrate pump and the filter, relay pressure signals (that may indicate occlusion) to the controller, which adjusts the rate of blood flow and filtrate flow accordingly. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to add the filtration system disclosed by Kitaevich to the occlusion monitoring system disclosed by Prince in order to protect the patient from dangerous extracorporeal circulation conditions.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,178,603 to Prince in view of US 5,211,849 to Kitaevich et al, further in view of US 5,464,392 to Epstein et al. Prince and Kitaevich disclose the method as claimed except for inducing patient movement to alleviate the occlusion. Epstein discloses that patient movement may cause occlusion of extracorporeal tubing, indicating that further movement would alleviate the occlusion. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to induce patient movement to alleviate a patient-relievable the occlusive condition in order to continue the extracorporeal therapy.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. US 4,828,543 Weiss et al
  - i. Extracorporeal circulation apparatus with pump speed controllers
- b. US 6,585,675 O'Mahony et al

ii. Method for controlling extracorporeal circulation

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie R. Deak whose telephone number is 703-305-0200. The examiner can normally be reached on M-F 7:30-5:00, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 703-308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3590.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0873.

Lrd  
29 January 2004



ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700